

Sub C2
-- 32. A method of operating a smart card and smart card terminal to simulate asynchronous communication between the smart card and smart card terminal such that either the smart card or the smart card terminal may operate as master and the other operating as slave wherein the smart card and smart card terminal communicate in a half-duplex protocol, comprising:

sending a first message from the smart card terminal to the smart card, wherein if the smart card terminal has no data to send the smart card, the packet is a polling packet;

receiving the first message at the smart card;

upon receipt of the first message, if the smart card has data to send, sending a second message from the smart card to the terminal containing a length of data indication;

upon receipt of the second message from the smart card, sending a third message from the terminal to the smart card as an indication from the terminal to the smart card to commence sending the data; and

131 sending a message containing the data from the smart card to the terminal.

33. The method of Claim 32 wherein the indication from the terminal is a special packet having a length which is equal to the length indicated by the smart card.

34. The method of Claim 32 further comprising marking each message with a unique sequence number correlating a sequence of messages.

35. The method of Claim 34 further comprising the step of deferring response to a message while sending other messages from the smart card to the terminal.

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36. The method of Claim 35, when a response to a deferred message is ready, sending a response to the deferred message by marking the message with the sequence number of the deferred message.

37. A smart card configured to communicate in an asynchronous matter to a smart card terminal, comprising:

means operable to request terminal resources.

38. The smart card of Claim 37 further comprising means operable to simulate asynchronous communication with the smart card terminal.

B1
Contd.

39. The smart card of Claim 37 wherein the terminal resources is access to network services.

40. The smart card of Claim 38 wherein the terminal resources is access to network services.

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41. The smart card of Claim 37 further comprising means operable to receive a polling packet from the terminal and in response to receiving a polling packet, operable to transmit an indication of the length of data the smart card desires to send to the terminal.

42. A computer system comprising:

a terminal for communicating with smart cards;

the terminal having a means for simulating asynchronous communication with the smart card.

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Contd

43. The computer system of Claim 42 wherein the terminal further comprises means for transmitting a polling packet to the smart card.

B1
Contd

44. The computer system of Claim 43 wherein the terminal further comprises means for receiving a data length indication from a smart card.

45. The computer system of Claim 44 wherein the terminal further comprises means for transmitting to the smart card an indication to commence transmitting data having the length indicated by the smart card in the data length indication.
